



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,041	11/18/2003	Roger B. Milne	X-1407 US	7435
24309	7590	10/27/2005		
XILINX, INC ATTN: LEGAL DEPARTMENT 2100 LOGIC DR SAN JOSE, CA 95124			EXAMINER DO, THUAN V	
			ART UNIT 2825	PAPER NUMBER

DATE MAILED: 10/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

876

Office Action Summary	Application No.		Applicant(s)	
	10/717,041		MILNE ET AL.	
	Examiner		Art Unit	
	Thuan Do		2825	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14-24 is/are pending in the application.
- 4a) Of the above claim(s) 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 13-18 is/are rejected.
- 7) ☒ Claim(s) 7-12 and 19-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/18/22003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is responsive to application filed on 11/18/2003. Claims 1-12,14-24 are pending in this office action. Claim 13 is withdrawn.

Restriction/Election

Group 1, claims 1-12,14-24 are elected by applicant's representative from a restriction and pending in this office action.

Group 2, claim 13 is not elected from species .

A telephone interview with Kim Kanzaki on 10/24/2005 to select group 1. The applicant is requested to cancel the claims of non-selected claim in the next response.

Claim objections

Claims 1 and 14, the terms "one pass through the high-level blocks" and "consistent with the clock requirements" are unclear to what applicants intend to mean especially how does the one pass operate in FIGs. 2, and 4 ? . Clarification or correction is required.

Claim Rejections - 35 USC f 11 2

The following is a quotation of the second paragraph of 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

2. Claims 1-6 and 13-18 are rejected under 35 U.S.C. 102(e) as being unpatentable over Schubert et al. Pat. No. 6823497.

Regarding claim 1: Schubert teaches a method comprising:

A processor-implemented method (col. 7, lines 41-44) for compiling high-level blocks of an electronic hardware design in a high-level modeling system (HLMS) into hardware description language (HDL) components (col. 2, lines 40-50), comprising:

establishing clock requirements for the electronic hardware design (col. 5, lines 8-22); and

generating in one pass through the high-level blocks, HDL components that are consistent with the clock requirements (col. 2, lines 28-64 and col. 63, lines 42-67 for generating HDL component requirements) .

Regarding claim 2: Schubert teaches a method of claim 1 with connections (Fig. 1B).

Regarding claim 3: Schubert teaches a method of claim 1 with:

traversing depth-first a hierarchy of high-level blocks (col. 13, lines 6-15);

generating, while traversing the hierarchy, associated compiler blocks for the high-level blocks, wherein each compiler block includes data that describes hardware ports associated with a high-level block and a name of an HDL component to be used to implement the compiler block (col. 13, lines 6-15); and

Art Unit: 2825

generating, while traversing the hierarchy, an HDL component from a compiler block when an associated high-level block in the hierarchy has no sub-blocks (col. 6, lines 38-44).

The remaining claims of 102(e) section contain features similar to the rejection of claims 1-3 and rejected in the rationale.

Allowable Subject Matter

Claims 7-12 and 19-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The reason for allowance is that the prior art of record does not teach the dependent claims with all other features of corresponding independent claims.

CONTACT INFORMATION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuan Do whose telephone number is 571-272-1891. The examiner can normally be reached on Monday-Friday 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Smith can be reached on 571-272-1907. The fax phone numbers for proceeding this application is 571 273-8300.

Art Unit: 2825

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0596.

A handwritten signature in black ink, appearing to read "Thuan Do".

Thuan Do
Primary examiner
10/25/2005